

(57) Abstract

A composite comprises Aa) at least one first layer which comprises a mixture Ia, comprising a mix IIa consisting of a) from 1 to 95 % by weight of a solid III, preferably a basic solid III, having a primary particle size f from 5 nm to 20 μ m and b) from 5 to 99 % by weight of a polymeric composition IV obtainable by polymerization of b1) from 5 to 100 % by weight, based on the composition IV, of a condensation product V of α) at least one compound VI which is able to react with a carboxylic acid or a sulfonic acid or a derivative or a mixture of two or more thereof, and β) at least 1 mol per mol of the compound VI of a carboxylic acid or sulfonic acid VII which contains at least one free-radically polymerizable functional group, or a derivative thereof or a mixture of two or more thereof, and b2) from 0 to 95 % by weight, based on the composition IV, of a further compound VIII having a mean molecular weight (number average) of at least 5000 and polyether segments in the main chain or a side chain, where the proportion by weight of the mix IIa in the mixture Ia is from 1 to 100 % by weight, and the layer is free of an electron-conducting, electrochemically active compound, and B) at least one second layer which comprises an electron-conducting, electrochemically active compound, wherein the first layer or layers and the second layer or layers are joined to one another by one of the two methods V1 or V2: V1) Lamination of the first layer or layers with the second layer or layers under the action of heat or pressure or under the action of heat and pressure, or V2 Corona treatment of the first layer or layers, the second layer or layers or the first layer or layers and the second layer or layers and subsequent bringing together of the corona-treated first layer or layers with the corona-treated or untreated second layer or layers.